A Peer-to-Peer Public Health Intervention – A Case Study in Transportation Safety

Laura M. Stanley
Department of Mechanical & Industrial Engineering
Montana State University
Bozeman, Montana 59715, USA
Laura.stanley@ie.montana.edu

Abstract

Traffic crashes are the primary cause of death for adolescents in America. The purpose of this project was to implement and assess a peer-to-peer public health intervention specifically targeted towards teen drivers in Montana. This project utilized the transportation domain to study and advance our understanding of the peer-to-peer approach as a public health intervention, and the subsequent social normative models that capture how attitudes and behavioral changes manifest among adolescents. The program was assessed using a case–control experimental design across two urban and two rural Montana high schools that included approximately 2,700 students. Results showed some early success in improving teens' awareness of the most dangerous risk factors for rural teen drivers. Urban teens reported being influenced most by their peers, closely followed by a parent, whereas rural teens reported being nearly equally influenced by their peers and a parent. Although our research targets a specific area of public health concern—teen driving—our results should be broadly applicable to peer-to-peer interventions impacting many areas of public health.

Keywords
Public health interventions, peer-to-peer, transportation safety, human factors

Biography

Laura M. Stanley is an Associate Professor in the Mechanical & Industrial Engineering Department at Montana State University and a Research Scientist at the Western Transportation Institute, where she is the Director of the Human Factors Driving Laboratory. Dr. Stanley has a B.S. in Industrial & Systems Engineering from Virginia Tech, M.S. and PhD in Industrial Engineering from Montana State University. Dr. Laura Stanley was recently selected as Program Director in the Directorate for Computer & Information Science & Engineering (CISE) at the National Science Foundation, where she will begin her service fall of 2015. Dr. Stanley's research interests include Human Factors, Transportation Safety, Learning in Virtual Environments, Human Computer Interaction, and Engineering Education. Dr. Stanley currently serves as Associate Editor for IEEE Transactions on Human-Machine Systems and serves on the scientific review committees for the Journal of the American Academy of Pediatrics, Accident Analysis & Prevention Journal, Journal of the Human Factors & Ergonomics Society, and Transportation Research Board.